ALTHEN
SENSORS & CONTROLS

bar MTM6861
Wireless Temperature Transmitter

MICROSENSOR
AUTHORIZED DISTRIBUTOR

MTM6861 is an intelligent wireless temperature transmitter with low power consumption and wireless communication function. It can be equipped with various network including NB-IoT/4G. It reports the data according to the set interval and sends alarms to users. Customers can configure the device and inquire for data remotely. All the upload and download data will be stored into the database automatically for later query. It is more intuitive, accurate and efficient through PC or mobile terminals access internet to acquire and analyze data as well as forming with report and data curve. It can be used to measure the temperature of various kinds of liquid, gases and solid surface in the range of -50 °C ~ 100 °C. The transmitter can detect the real-time data of many monitoring points in a large area such as boiler water temperature, petrochemical, metallurgy, power station and other fields that need unattended and remote monitoring.

FEATURES

- NB-IoT / 4G network for application
- Integrated high-energy lithium battery, with service life over 2 years
- Data application in PC and mobile terminals, device data query
- Based on GIS managing system, device status prompt
- Support remote setting for data collecting frequency, data transferring frequency, etc.
- Indicator light alert for device state/abnormal conditions
- Opened database and interface protocol, and available interface parsing file

SPECIFICATIONS

- Temperature Range: -50°C ~150°C
- Accuracy: ±2°C
- Power Supply: 3.6V@38Ah Lithium Battery/9V~36V DC
- SIM Card: Nano SIM (12mm×9mm)
- Display: LCD display
- Keyboard: Panel key triggered
- Setting: In site/Remote control
- Weight: ≥1.5kgs
- Communication Mode: NB-IoT/4G
- Communication Protocol: MQTT
- Consumption: Average current at sending status ≤100mA@3.6V DC, at sleep mode ≤25uA@3.6V DC

■ ENVIRONMENT CONDITIONS

- Operation Temperature: -20°C ~70°C
- Storage Temperature: -40°C ~85°C
- Relative Humidity: 0%~95%
- Protection: IP65
- Explosion-proof: Exd IIC T6 Gb
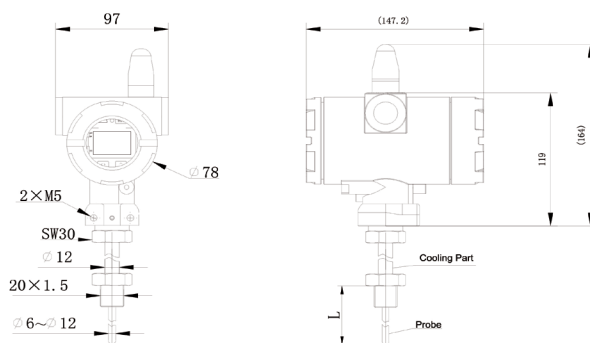
■ OUTLINE CONSTRUCTION (Unit: mm)

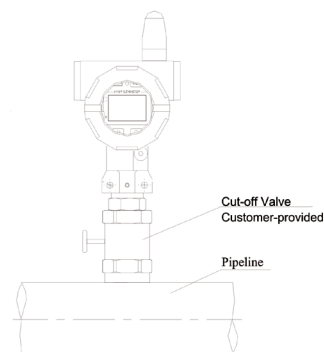**Fig.1 MTM6861 Wireless Temperature Transmitter**

Fig.2 Installation of MTM6861 Wireless Temperature Transmitter
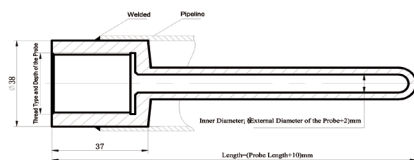
Fig. 3 Thermowell Reference (Customer)-provided)

■ DATA TRANSMISSION

Communication Mode		Standard/Band	Transmission Distance
Multi-Bands	China	TDD-LTE B38/B39/B40/B41 FDD-LTE B1/B3/B8 TD-SCDMA B34/B39 WCDMA B1 CDMA 1X/EVDO BC0 GSM/GPRS/EDGE B3/B8	Global Bands
	Europe / Korea / EMEA/ Thailand / India	FDD-LTE B1/B3/B5/B7/B8/B20 WCDMA B1/B5/B8 GSM/GPRS/EDGE B3/B8	
	North America	FDD-LTE B2/B4/B12 WCMDA B2/B5	

Version | 09.2021

DATA TRANSMISSION

Communication Mode		Standard/Band	Transmission Distance
Multi-Bands	South America / Australia/ New Zealand / Taiwan, China	TDD-LTE B40 FDD-LTE B1/B2/B3/B4/B5/B7/B8/B28 WCDMA B1/B2/B5/B8 GSM/GPRS/EDGE B2/B3/B5/B8	Global Bands
	NB-IoT	B3/B5/B8	

ORDER GUIDE

MTM6861	Wireless Temperature Transmitter								
	Range	Measuring Range (-50℃ ~150℃)							
	[X~Y]℃	X and Y represent the lower and upper limits of the temperature Unit= ℃ ,(-50℃ ~150 ℃) (Default: 0 ℃ ~100 ℃)							
		Code	Communication Mode						
		GC	4G Multi-Bands in China mainland						
		GE	4G Multi-Bands in EMEA/Korea/Thailand/India						
		GA	4G Multi-Bands in North America						
		GS	4G Multi-Bands in South America/Australia/New Zealand/Taiwan, China						
		GN	NB-IoT						
		GD	4G, 2G and NB-IoT, three-in-one						
			Code	Power Supply					
			N	Without Battery					
			E	Disposable Lithium-thionyl Chloride (Li-SOCl2) Battery (3.6V/38Ah)					
			D	DC Power Supply(9V ~36V DC)					
				Code	Antenna Type				
				A1	Integrated Antenna (Recommended)				
				A2	External Sucker Antenna (Length=1m)				
					Code	SIM Card			
					S2	Self-owned SIM card (Data Flow Service Required)			
						Code	Software Service Type		
						M	Micro Sensor Big Data Platform		
						C	Customer Self-built Platform (Note on Docking Mode)		
							Code	Others	
							C1	Thread Installation, M20×1.5 Male	
							C3	Thread Installation, G1/2 Male	
							C5	M20×1.5 Male Waterline Seal	
							L5	Length of probe L=50Mm (customized)	
							d	Explosion Proof Exd IIC T6 Gb	
MTM6861	[0 ~100]℃	GE	E	A1	S2	M	C1L5	The whole spec.	

Version | 09.2021

■ INTRODUCTION OF EXPLOSION PROOF EXD IIC T6 GB

Model: Intelligent Wireless Pressure Transmitter

Code: M⬚1⬚M6861-⬚2⬚-⬚3⬚-⬚4⬚-⬚5⬚

Explosion Proof Rate: Exd IIC T6 Gb

Technical File: Q/MS J02.067-2019

Note:

1. Rated Voltage: 9~36V DC or 3.6V battery supply.

2. Code meaning:

⬚1⬚: P-Pressure, T-Temperature, D-Differential Pressure;

⬚2⬚: Pressure Range;

⬚3⬚: Communication Mode;

⬚4⬚: Power supply;

⬚5⬚: Antenna.

3. Housing Protection Class: IP65.

4. Environment Temperature:-20°C ≤Temp.≤70°C .

■ ORDER NOTES:

1.　 Please choose the installation method and mounting interface according to the dimension of the mounting interface. The inserted depth of the probe should not be less than ten times of the diameter of the protective tube.

2.　 The default material of probe is stainless steel 304, unless otherwise specified.

3.　 The default cooling part length of temperature transmitter is 0mm, please specify if you have special requirement

Type		Length	Diameter	Note
Length of Cooling Part	Default	0mm		-100℃ <Temp.<100℃
	Customized	20mm~50mm		-200℃ <Temp.<200℃
Probe Length	Default	50mm		
	Customized	5mm~100mm	Ø6 (default) Ø6 ~ Ø12	

4. If users need docking platform, please refer to the following (such as: I1);

Classification:

I1: No docking, Micro Sensor platform is selected;

I2: Retrieves data through the API interface;

I3: Open limited access to the database and users can retrieve data themselves;

I4: Force control configuration docking;

I5: Provide communication protocol and users will write the analysis program to complete the docking;

I6: Set up the resolution server, deploy the resolver, and deploy the default database (php+apache+Mysql);

I7: Set up the resolution server, deploy the specified database resolution program (sqlserver, oracle, postgresql...);

I8: Deploy the parsing SDK to parse the data according to the data format specified by the customer;

I9: Users customize docking method, note required.

5. For special requirements, please contact us and note in the order

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